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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,973	08/02/2001	Hiroshi Komori	KOMORI ET AL-1	7669
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COLLARD & ROE, P.C. 1077 Northern Boulevard Roslyn, NY 11576-1696		EXAMINER PATEL, ASHOK		
		ART UNIT PAPER NUMBER		
		2879		

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

SR

Office Action Summary	Application No. 09/921,973	Applicant(s) KOMORI ET AL.	
	Examiner Ashok Patel	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 13 February 2004.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-16 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-16 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

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1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the CRT panel glass, as recited in preamble of all current claims must be shown. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

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corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. Applicant's arguments filed 02/13/204 have been fully considered but they are not persuasive.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Publication no. 63-215533, of record.

Japanese publication 63-215533 discloses a CRT panel glass, which does not substantially contain PbO, and which contains values in mass percentages, which overlap those recited in

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applicant's claimed ranges of: 45 and 60% SiO_2 , 0-1% Al_2O_3 , 0-3% MgO , 0-3% CaO , 5-11% SrO , 8-16% BaO , 6-8% ZnO , 1-6% Na_2O , 5-13% K_2O , 0.1-3% Li_2O , 0-1.5% ZrO_2 , 0-3% TiO_2 , 0-3% CeO_2 , 0-2% Sb_2O_3 , 0-2% P_2O_5 . The Japanese publication 63-215533 further discloses values in mass percent, which overlaps applicant's claimed range of 0.3-0.45 for $\text{SrO}/(\text{SrO}+\text{BaO})$, and because the X-ray absorption coefficient is intrinsic to the material, it is noted that since the Japanese publication 63-215533 discloses the same structure then the X-ray absorption coefficient of 36.0 cm^{-1} or more at 0.6 \AA is inherently there as well (see Embodiment 1, page 177).

Regarding claims 2, the Japanese publication 63-215533 discloses that the content of SiO_2 , could fall within the range of 50-58% (see embodiment 1, page 177).

Regarding Claim 3, Japanese publication 63-215533 further discloses that the content of Al_2O_3 could be less than 0.9% (see Embodiment 1, page 177).

Regarding Claim 4, the Japanese publication 63-215533 further discloses that the content of each of MgO and CaO could be 2% or less (see Embodiment 1, page 177).

Regarding Claim 5, the Japanese publication 63-215533 further discloses that the content of SrO could fall with the range of 6-10% (see Embodiment 1, page 177).

Regarding Claim 6, the Japanese publication 63-215533 further discloses that the content of BaO could fall with the range of 9-15% (see Embodiment 1, page 177).

Regarding Claim 7, the Japanese publication 63-215533 further discloses that the content of ZnO could fall with the range of 6.2-7.8% (see Embodiment 1, page 177).

Regarding Claim 8, the Japanese publication 63-215533 further discloses that the content of Na₂O could fall with the range of 2-5% (see Embodiment 1, page 177).

Regarding Claim 9, the Japanese publication 63-215533 further discloses that the content of K₂O could fall with the range of 6-12% (see Embodiment 1, page 177).

Regarding Claim 10, the Japanese publication 63-215533 further discloses that the content of Li₂O could fall with the range of 0.5-2.5% (see Embodiment 1, page 177).

Regarding Claim 11, the Japanese publication 63-215533 further discloses that the content of ZrO₂ could fall with the range of 0.1-1.4% (see Embodiment 1, page 177).

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Regarding Claim 12, the Japanese publication 63-215533 further discloses that the content of TiO_2 could fall with the range of 0.1-2% (see Embodiment 1, page 177).

Regarding Claim 13, the Japanese publication 63-215533 reference further discloses that the content of CeO_2 could fall with the range of 0.1-2% (see Embodiment 1, page 177).

Regarding Claim 14, the Japanese publication 63-215533 further discloses that the content of Sb_2O_3 could be less than 1% (see Embodiment 1, page 177).

Regarding Claim 15, the Japanese publication 63-215533 reference further discloses that the content of P_2O_5 could be less than 1% (see Embodiment 1, page 177).

Regarding Claim 16, the Japanese publication 63-215533 reference further discloses that the range $\text{SrO}/(\text{SrO} + \text{BaO})$ in the range of 0.32 to 0.43 (see Embodiment 1, page 177).

5. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Publication no. 3-12337, of record.

Japanese publication 3-12337 discloses a CRT panel glass, which does not substantially contain PbO , and which contains

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values in mass percentages, which overlap those recited in applicant's claimed ranges of: 45 and 60% SiO₂, 0-1% Al₂O₃, 0-3% MgO, 0-3% CaO, 5-11% SrO, 8-16% BaO, 6-8% ZnO, 1-6% Na₂O, 5-13% K₂O, 0.1-3% Li₂O, 0-1.5% ZrO₂, 0-3% TiO₂, 0-3% CeO₂, 0-2% Sb₂O₃, 0-2% P₂O₅. the Japanese publication 3-12337 further discloses values in mass percent, which overlaps applicant's claimed range of 0.3-0.45 for SrO/(SrO+BaO), and because the X-ray absorption coefficient is intrinsic to the material, it is noted that since the Japanese publication 3-12337 discloses the same structure then the X-ray absorption coefficient of 36.0 cm⁻¹ or more at 0.6 Å is inherently there as well (see Embodiment 1, page 219).

Regarding claims 2, the Japanese publication 3-12337 discloses that the content of SiO₂, could fall within the range of 50-58% (see embodiment1, page 219).

Regarding Claim 3, Japanese publication 3-12337 further discloses that the content of Al₂O₃ could be less than 0.9% (see Embodiment 1, page 219).

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Regarding Claim 4, the Japanese publication 3-12337 further discloses that the content of each of MgO and CaO could be 2% or less (see Embodiment 1, page 219).

Regarding Claim 5, the Japanese publication 3-12337 further discloses that the content of SrO could fall with the range of 6-10% (see Embodiment 1, page 219).

Regarding Claim 6, the Japanese publication 3-12337 further discloses that the content of BaO could fall with the range of 9-15% (see Embodiment 1, page 219).

Regarding Claim 7, the Japanese publication 3-12337 further discloses that the content of ZnO could fall with the range of 6.2-7.8% (see Embodiment 1, page 219).

Regarding Claim 8, the Japanese publication 3-12337 further discloses that the content of Na₂O could fall with the range of 2-5% (see Embodiment 1, page 219).

Regarding Claim 9, the Japanese publication 3-12337 further discloses that the content of K₂O could fall with the range of 6-12% (see Embodiment 1, page 219).

Regarding Claim 10, the Japanese publication 3-12337 further discloses that the content of Li₂O could fall with the range of 0.5-2.5% (see Embodiment 1, page 219).

Regarding Claim 11, the Japanese publication 3-12337 further discloses that the content of ZrO_2 could fall with the range of 0.1-1.4% (see Embodiment 1, page 219).

Regarding Claim 12, the Japanese publication 3-12337 further discloses that the content of TiO_2 could fall with the range of 0.1-2% (see Embodiment 1, page 219).

Regarding Claim 13, the Japanese publication 3-12337 reference further discloses that the content of CeO_2 could fall with the range of 0.1-2% (see Embodiment 1, page 219).

Regarding Claim 14, the Japanese publication 3-12337 further discloses that the content of Sb_2O_3 could be less than 1% (see Embodiment 1, page 219).

Regarding Claim 15, the Japanese publication 3-12337 reference further discloses that the content of P_2O_5 could be less than 1% (see Embodiment 1, page 219).

Regarding Claim 16, the Japanese publication 3-12337 reference further discloses that the range $\text{SrO}/(\text{SrO} + \text{BaO})$ in the range of 0.32 to 0.43 (see Embodiment 1, page 219).

6. Applicant has presented affidavit under Rule 37 C.F.R. 1.132 on 02/13/2004. However the affidavit recites Glass Samples

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B and C as typical examples. Applicant's claimed ranges of different chemical compounds do overlap with that of the two Japanese prior art publications. Since applicant's claimed different ranges are disclosed by each of the two Japanese prior art publications, they individually anticipate applicant's claims 1-13.

7. The Examiner further rejects instant claims 1-13 under 35 U.S.C. 102 as follows.

8. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Kukori et al (USPN 6,790,799)

Kukori et al disclose applicant's claimed CRT panel glass which does not substantially contain PbO, and which contains values in mass percentages, which overlap those recited in applicant's claimed ranges of: 45 and 60% SiO₂, 0-1% Al₂O₃, 0-3% MgO, 0-3% CaO, 5-11% SrO, 8-16% BaO, 6-8% ZnO, 1-6% Na₂O, 5-13% K₂O, 0.1-3% Li₂O, 0-1.5% ZrO₂, 0-3% TiO₂, 0-3% CeO₂, 0-2% Sb₂O₃, 0-2% P₂O₅. Kukori et al further disclose values in mass percent, which overlaps applicant's claimed range of 0.3-0.45 for SrO/(SrO + BaO), and because the X-ray absorption

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coefficient is intrinsic to the material, it is noted that since Kukori et al disclose the same structure then the X-ray absorption coefficient of 36.0 cm^{-1} or more at 0.6 \AA is inherently there as well (see Table in Column 3 and claim 3).

Regarding claims 2, Kukori et al discloses that the content of SiO_2 , could fall within the range of 50-58% (see Table in Column 3 and claim 3).

Regarding Claim 3, Kukori et al further discloses that the content of Al_2O_3 could be less than 0.9% (see Table in Column 3 and claim 3).

Regarding Claim 4, Kukori et al further discloses that the content of each of MgO and CaO could be 2% or less (see Table in Column 3 and claim 3).

Regarding Claim 5, Kukori et al further discloses that the content of SrO could fall with the range of 6-10% (see Table in Column 3 and claim 3).

Regarding Claim 6, Kukori et al further discloses that the content of BaO could fall with the range of 9-15% (see Table in Column 3 and claim 3).

Regarding Claim 7, Kukori et al further discloses that the content of ZnO could fall with the range of 6.2-7.8% (see Table in Column 3 and claim 3).

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Regarding Claim 8, Kukori et al further discloses that the content of Na_2O could fall with the range of 2-5% (see Table in Column 3 and claim 3).

Regarding Claim 9, Kukori et al further discloses that the content of K_2O could fall with the range of 6-12% (see Table in Column 3 and claim 3).

Regarding Claim 10, Kukori et al further discloses that the content of Li_2O could fall with the range of 0.5-2.5% (see Table in Column 3 and claim 3).

Regarding Claim 11, Kukori et al further discloses that the content of ZrO_2 could fall with the range of 0.1-1.4% (see Table in Column 3 and claim 3).

Regarding Claim 12, Kukori et al further discloses that the content of TiO_2 could fall with the range of 0.1-2% (see Table in Column 3 and claim 3).

Regarding Claim 13, Kukori et al further discloses that the content of CeO_2 could fall with the range of 0.1-2% (see Table in Column 3 and claim 3).

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Regarding Claim 14, Kukori et al further discloses that the content of Sb_2O_3 could be less than 1% (see Table in Column 3 and claim 3).

Regarding Claim 15, Kukori et al further discloses that the content of P_2O_5 could be less than 1% (see Table in Column 3 and claim 3).

Regarding Claim 16, Kukori et al further discloses that the range $\text{SrO}/(\text{SrO} + \text{BaO})$ in the range of 0.32 to 0.43 (see Table in Column 3 and claim 3).

9. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Naumann et al (USPN 6,403,507).

Naumann et al disclose applicant's claimed CRT panel glass which does not substantially contain PbO , and which contains values in mass percentages, which overlap those recited in applicant's claimed ranges of: 45 and 60% SiO_2 , 0-1% Al_2O_3 , 0-3% MgO , 0-3% CaO , 5-11% SrO , 8-16% BaO , 6-8% ZnO , 1-6% Na_2O , 5-13% K_2O , 0.1-3% Li_2O , 0-1.5% ZrO_2 , 0-3% TiO_2 , 0-3% CeO_2 , 0-2% Sb_2O_3 , 0-2% P_2O_5 . Naumann et al further disclose values in mass percent, which overlaps applicant's claimed range of 0.3-0.45 for $\text{SrO}/(\text{SrO} + \text{BaO})$, and because the X-ray absorption

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coefficient is intrinsic to the material, it is noted that since Naumann et al discloses the same structure then the X-ray absorption coefficient of 36.0 cm^{-1} or more at 0.6 \AA is inherently there as well (see top Table in Column 2 and claim 7).

Regarding claims 2, Naumann et al discloses that the content of SiO_2 , could fall within the range of 50-58% (see top Table in Column 2 and claim 7).

Regarding Claim 3, Naumann further discloses that the content of Al_2O_3 could be less than 0.9% (see top Table in Column 2 and claim 7).

Regarding Claim 4, Naumann et al further discloses that the content of each of MgO and CaO could be 2% or less (see top Table in Column 2 and claim 7).

Regarding Claim 5, Naumann et al further discloses that the content of SrO could fall with the range of 6-10% (see top Table in Column 2 and claim 7).

Regarding Claim 6, Naumann et al further discloses that the content of BaO could fall with the range of 9-15% (see top Table in Column 2 and claim 7).

Regarding Claim 7, Naumann et al further discloses that the content of ZnO could fall with the range of 6.2-7.8% (see top Table in Column 2 and claim 7).

Regarding Claim 8, Naumann et al further discloses that the content of Na₂O could fall with the range of 2-5% (see top Table in Column 2 and claim 7).

Regarding Claim 9, Naumann et al further discloses that the content of K₂O could fall with the range of 6-12% (see top Table in Column 2 and claim 7).

Regarding Claim 10, Naumann et al further discloses that the content of Li₂O could fall with the range of 0.5-2.5% (see top Table in Column 2 and claim 7).

Regarding Claim 11, Naumann et al further discloses that the content of ZrO₂ could fall with the range of 0.1-1.4% (see top Table in Column 2 and claim 7).

Regarding Claim 12, Naumann et al further discloses that the content of TiO₂ could fall with the range of 0.1-2% (see top Table in Column 2 and claim 7).

Regarding Claim 13, Naumann et al further discloses that the content of CeO₂ could fall with the range of 0.1-2% (see top Table in Column 2 and claim 7).

Regarding Claim 13, Naumann et al et al further discloses that the content of CeO_2 could fall with the range of 0.1-2% (see top Table in Column 2 and claim 7).

Regarding Claim 14, Naumann et al et al further discloses that the content of Sb_2O_3 could be less than 1% (see top Table in Column 2 and claim 7).

Regarding Claim 15, Naumann et al et al further discloses that the content of P_2O_5 could be less than 1% (see top Table in Column 2 and claim 7).

Regarding Claim 16, Naumann et al et al further discloses that the range $\text{SrO}/(\text{SrO} + \text{BaO})$ in the range of 0.32 to 0.43 (see top Table in Column 2 and claim 7).

10. Claims 1-13 of this application conflict with claim 1 of Application No. 10/277,883. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

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11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1-13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No.

10/277,883. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the co-pending application recites: a CRT panel glass as claimed by applicant, which does not substantially contain PbO and which includes all of applicant's claimed different compounds with respective ranges that are recited instant claims or that overlap with ranges recited in applicant's claims as follows:

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<u>Instant application claims</u>	<u>Claims of the co-pending application 10/277,883</u>
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	1
13	1
14	1
15	1
16	1


This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok Patel whose telephone number is 571-272-2456. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ashok Patel
Primary Examiner
Art Unit 2879